System Design

For

Pharmacy Management & Medicine Checker

Team Name: Web Warriors

Team Members

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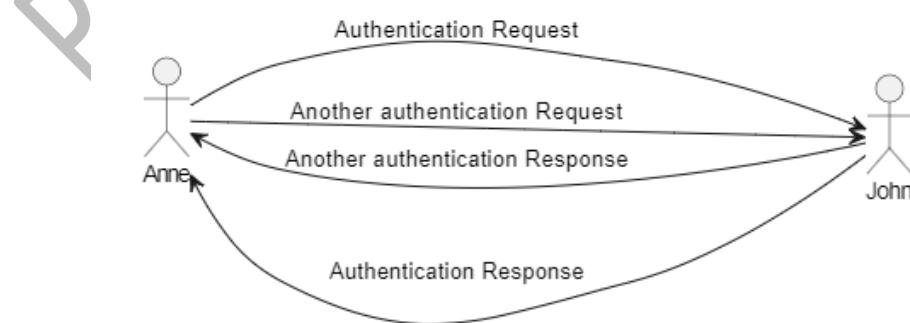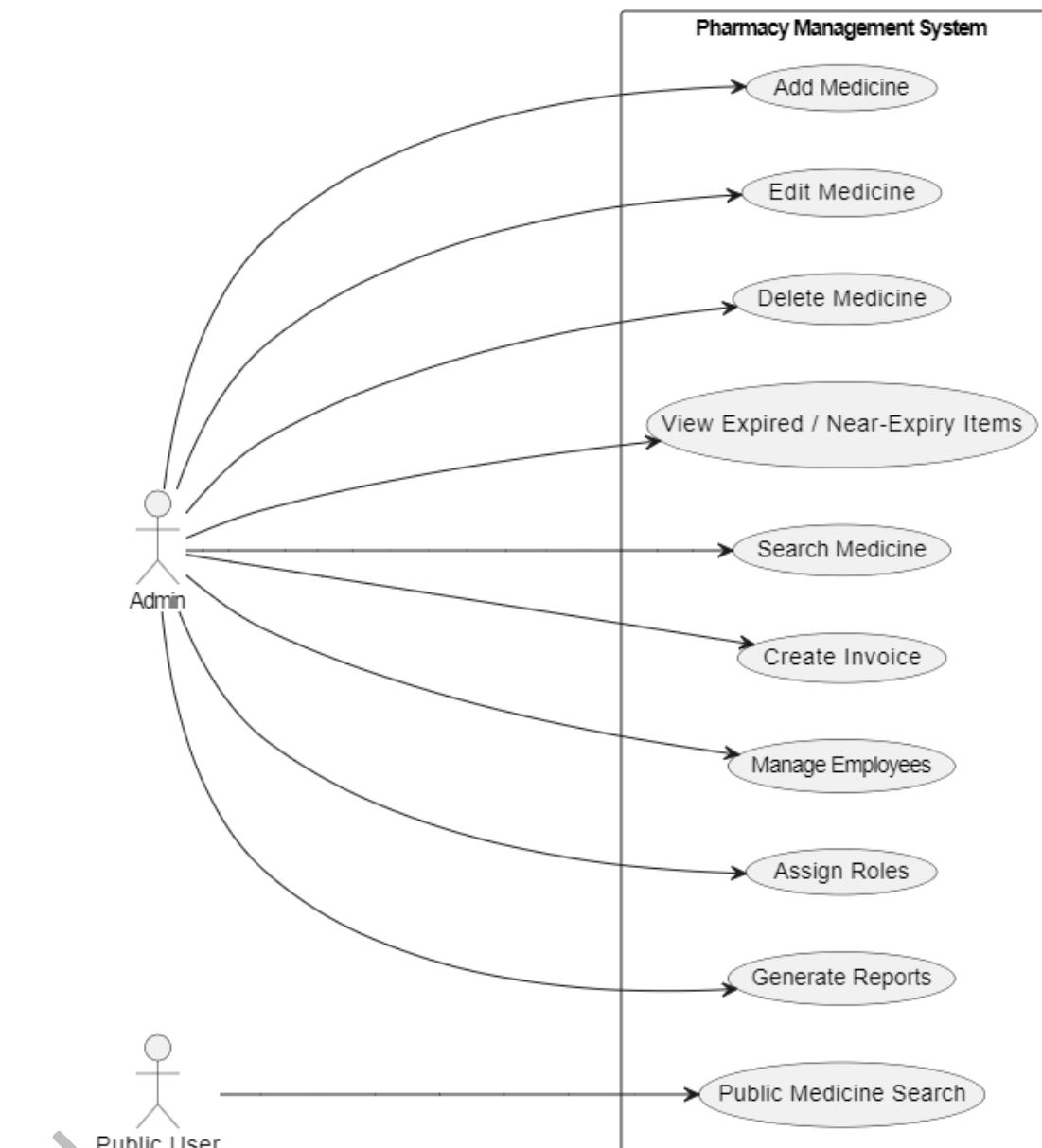
Submitted to:
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Contents

1- Use Case for the Pharmacy system.

Pharmacy Management System

- Add Medicine
- Edit Medicine
- Delete Medicine
- View Expired / Near-Expiry Items
- Search Medicine
- Create Invoice
- Manage Employees
- Assign Roles
- Generate Reports
- Public Medicine Search

Admin

Public User

Authentication Request

Another authentication Request

Another authentication Response

Anne

John

Authentication Response

2- Tabular Description for the Use Case.

Pharmacy Management System: Manage Medicines

Actors	Admin
Description	Manage medicines in the system (add, edit, delete, search, view expired/near-expiry)
Data	Medicine details, expiry dates
Stimulus	Admin selects medicine management functions
Response	Medicines are added, updated, deleted, or displayed
Comments	Ensures accurate inventory control

Pharmacy Management System: Sales and Invoice Management

Actors	Admin
Description	Handle medicine sales and generate invoices
Data	Medicine list, quantities, prices, total amount
Stimulus	Admin creates a new invoice
Response	Invoice is generated and stock is updated
Comments	Requires sufficient stock

## Pharmacy Management System: Reports Management
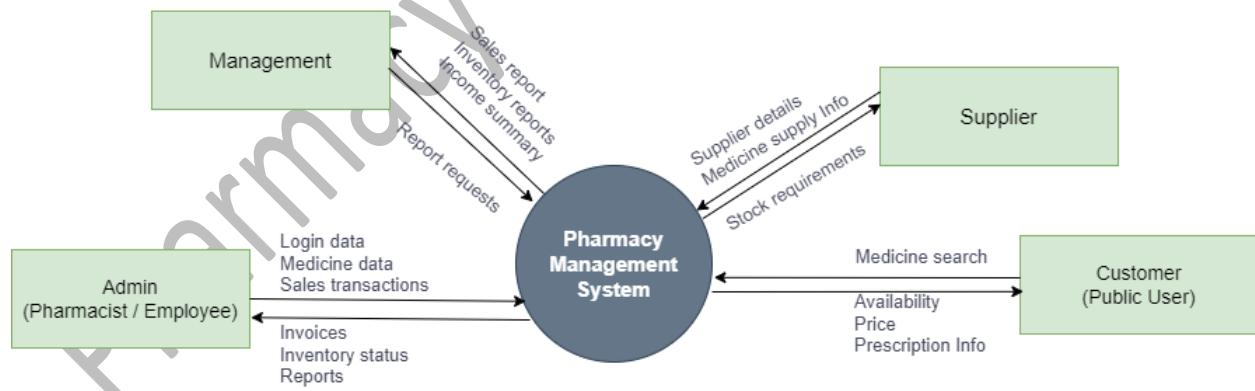
Actors	Admin
Description	Generate reports for sales and inventory
Data	Sales data, inventory data
Stimulus	Admin selects generate reports
Response	Reports are generated and displayed
Comments	Supports decision making

Pharmacy Management System: Public Medicine Search

| Actors	Public User
Description	Search for available medicines without authentication
Data	Medicine name
Stimulus	User enters medicine name
Response	Search results are displayed
Comments	Limited information is shown
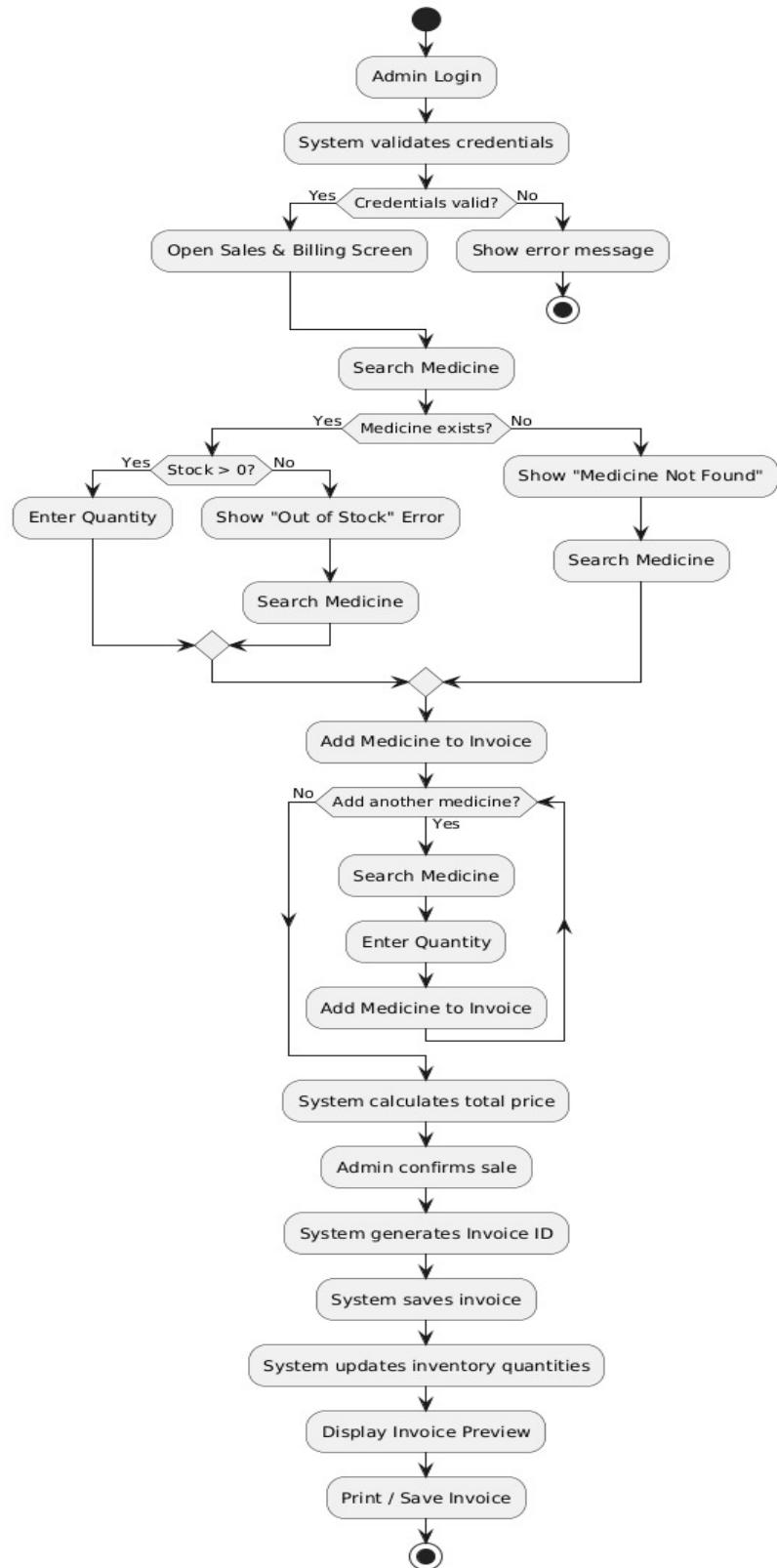
3- Context Model for the Pharmacy Management.

Context Diagram: Pharmacy management system
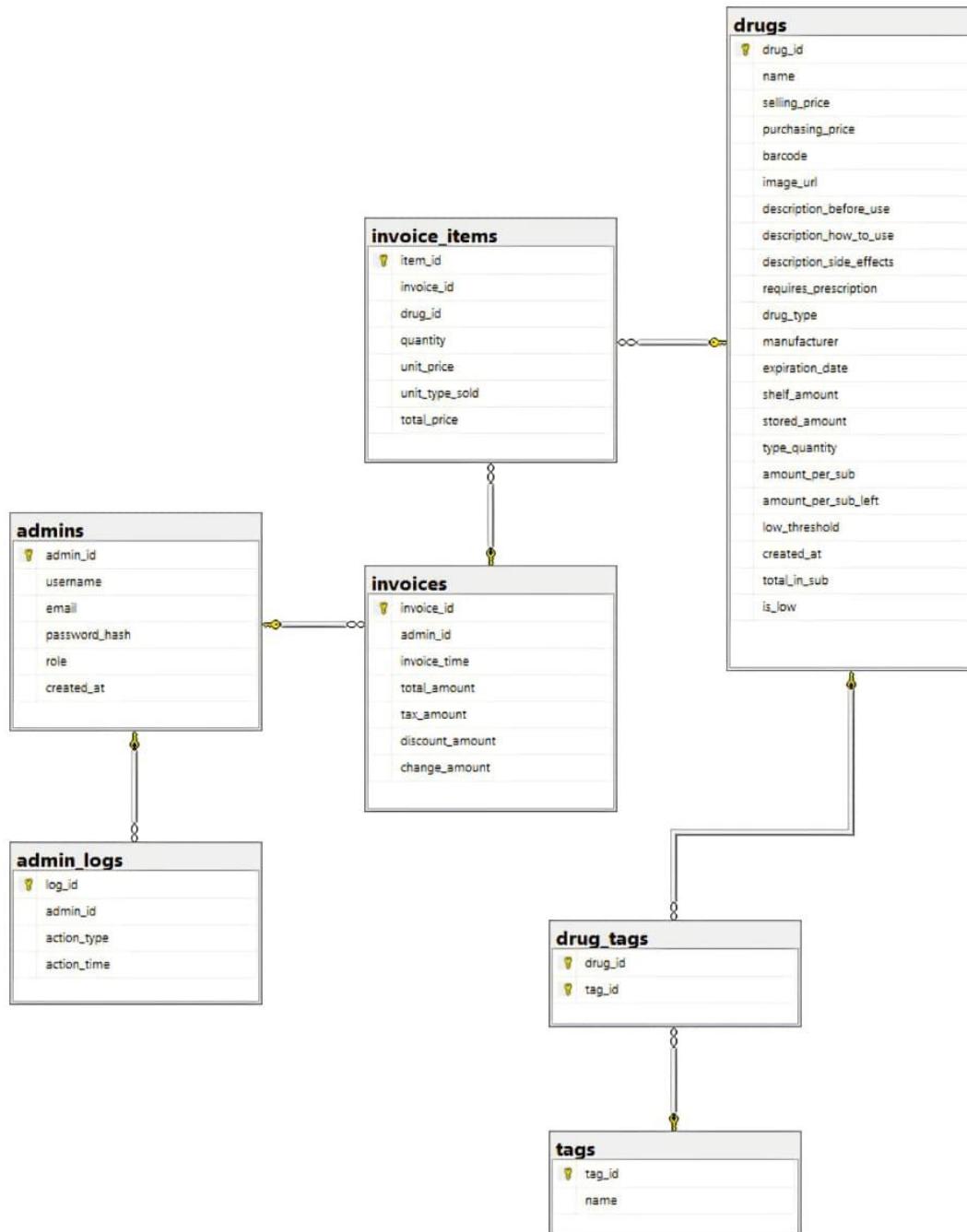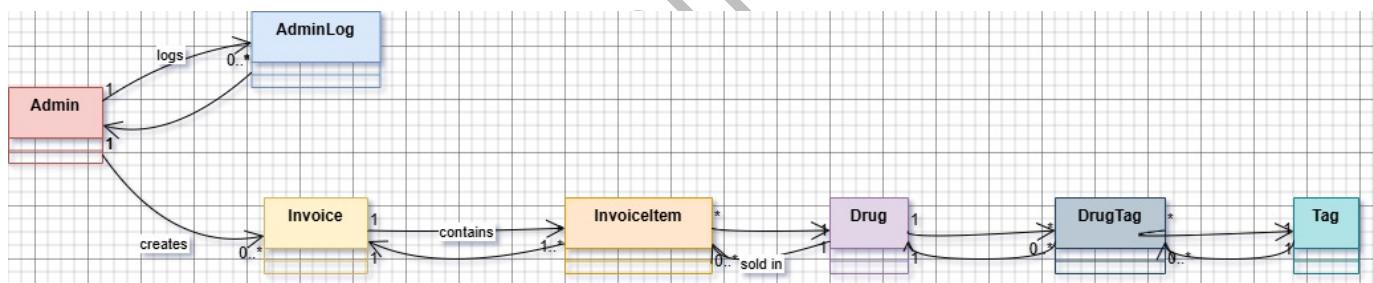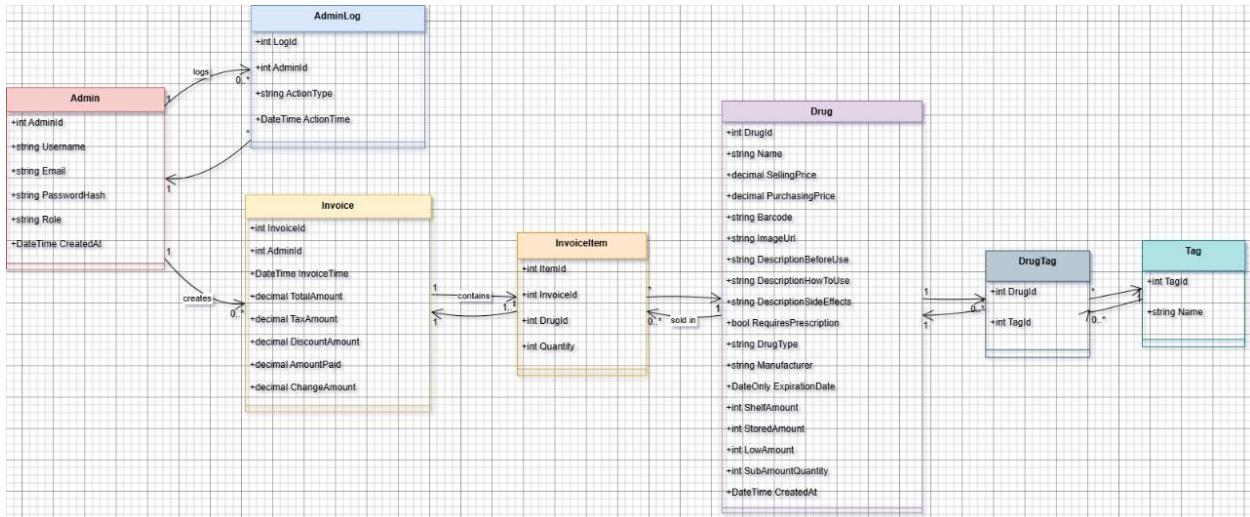
4- Activity Diagram for the Pharmacy Management.

Pharmacy Management System - Medicine Sales Activity Diagram

5- Class Diagram for the Pharmacy Management.

drugs
- drug_id
- name
- selling_price
- purchasing_price
- barcode
- image_url
- description_before_use
- description_how_to_use
- description_side_effects
- requires_prescription
- drug_type
- manufacturer
- expiration_date
- shelf_amount
- stored_amount
- type_quantity
- amount_per_sub
- amount_per_sub_left
- low_threshold
- created_at
- total_in_sub
- is_low

invoice_items
- item_id
- invoice_id
- drug_id
- quantity
- unit_price
- unit_type_sold
- total_price

admins
- admin_id
- username
- email
- password_hash
- role
- created_at

invoices
- invoice_id
- admin_id
- invoice_time
- total_amount
- tax_amount
- discount_amount
- change_amount

admin_logs
- log_id
- admin_id
- action_type
- action_time

drug_tags
- drug_id
- tag_id

tags
- tag_id
- name

Thank you so much for your interesting and attention.